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ABSTRACT

A study was made of the opinions and programs of a selected group of 77 vocational agriculture instructors to determine the status of supervised occupational experience (SOE) programs among secondary agricultural instructors who had been identified as some of the best in the states surveyed. Of particular interest was the relative role that the three primary options for obtaining SOE (supervised farming, placement, and school land laboratory) played in these selected programs. From the information gathered from a mailed survey of the teachers, the study found that 91 percent of students in secondary agricultural education were involved in the SOE program and that supervised farming is the most often used option, although none of the SOE options has a majority of agricultural students. Older teachers had more of their students in supervised farming, while younger teachers had more of their students in the land laboratory. Most teachers in the study felt that SOE was more important in their programs today than it had been in the past. No differences were found in teachers' opinions by age, teaching experience, type of school, or size of programs, although rural teachers placed more emphasis on SOE than did urban teachers. Teachers indicated that they expect to place more emphasis on SOE programs in the future. Recommendations were made for further study and for placing more emphasis on preparing teachers to supervise SOE programs. In addition, the study called for more rewards for the placement and land laboratories options, since they are used about as often as the farm practice option. (KC)

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Department of Agricultural and Extension Education
College of Agriculture and Natural Resources
Michigan State University

AN EXAMINATION OF THE OPINIONS AND SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS OF SELECTED VOCATIONAL AGRICULTURAL INSTRUCTORS IN THE U.S.

by
Frank Bobbitt
Professor

Staff Study
1986

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CHAPTER 1

INTRODUCTION

The secondary agricultural education program in the U.S. has had a long and illustrious history of contributing to the educational development of youth interested in occupations in agriculture. Over the years many adjustments to the program have taken place. The Vocational Education Act of 1963 provided legislation that greatly expanded the scope and clientele of agriculture education. Agribusiness and girls became integral parts of the program. At the same time farming as an occupation was declining in numbers as farms became larger with fewer individuals employed in farming.

These changes along with many other variables has forced the agricultural education program to undergo fundamental changes over the years. Some of the changes have evolved so slowly that at times the changes have been hardly noticeable. Sometimes changes in the programs occur without the full understanding of the participants in the program of the depth or extent of the new set of circumstances. A clear understanding of current programs and the factors that cause them to take on the characteristics

they exhibit is important in assisting programs to be as effective as possible.

One of the significant parts of the agricultural education program over the years has been the supervised occupational experience program. Early in it's development the program focused almost entirely on developing farmers through the supervised farming program. All students were expected to have home production projects as a part of their educational program. Over the years, the concept of placement for agricultural experience was added as the number of students in agricultural education began to come in increasing numbers from nonfarm homes. The expansion of agricultural education into agribusiness after 1963 accelerated the changes in the supervised occupational experience program. Less emphasis was placed on the supervised farming supervised occupational experience (SOE) option and more on the placement option. In addition, another option, the school laboratory, became more important as the opportunities for youngsters to work as learners in the agricultural industry decreased in availability. Schools began to simulate the occupational situation to expose students to skills that were important in the agricultural industry.

So many changes have taken place in the SOE program that it was important to examine the depth and extent of changes that have taken place. A comprehensive review of the situation could help teachers operate most effectively with the modern agricultural education program.

Problem

The problem investigated by the study was an examination of the opinions and programs of a selected group of vocational agriculture instructors about their supervised occupational occupational experience programs. The study was conducted to determine what the status of SOE was among secondary agricultural instructors who had been identified as some of the best in the states surveyed. Of particular interest was the relative role the three primary options for obtaining SOE, i.e. (1) supervised farming, (2) placement and (3) school land laboratory, played in these selected programs.

Objectives

The objectives of the study were:

1. To determine the percentage of students in secondary agricultural education who participate in the SOE program.
2. To determine the relative utilization of the three main types of SOE options in secondary agricultural education.
3. To determine the opinions of secondary agricultural education instructors about the importance of SOE programs in secondary agricultural education.
4. To determine the opinions of secondary agricultural education instructors about the future of SOE programs in secondary agricultural education.

Research Questions

1. What is the percentage of students in secondary agricultural education who participate in the SOE program.
2. Which of the SOE options is most often used under different situations.

3. What are the opinions of secondary agriculture instructors about the importance of SOE in agricultural education.

4. What are the opinions of secondary agriculture instructors about the future of SOE in agricultural education.

Related Literature

Two recent dissertations in agricultural education at Michigan State University by Shahrokh[1] and Powers[2] reported findings that seemed to indicate that there were major changes taking place in the secondary agricultural education programs in Michigan. The studies reported changes both in the character and the intensity of the SOE program in Michigan.

Shahrokh[3] in his study of high school seniors enrolled in secondary agricultural education found that 38.9 percent had participated in SOE programs that focused on home farm production. He found that 32.9 percent had participated in SOE programs focused on the school land laboratory program and 28.1 percent had SOE programs that focused on farm or agribusiness placement programs. The percentage of students with the school land laboratory as the source of their SOE was higher than expected by some in agricultural education.
Additional conclusions drawn in the study were that students with placement as their principle source of SOE felt their production

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[1] Darysoush Shahrokh, "A Study Of The Agricultural Competencies Of Senior Vocational Agriculture Students In Michigan Based On Their Supervised Occupational Experience Programs" (Ph.D. dissertation, Michigan State University, 1983).
[2] Larry Powers, "A Study Of Professional Role Perceptions Held By Two Selected Groups Of Vocational Agriculture Teachers In Michigan" (Ph.D. dissertation, Michigan State University, 1985).
[3] Ibid., pp. 93-100.

agriculture competencies were significantly higher than those in home farm production and those with the school land lab as principle sources of SOE.

Powers[4] in his study of the role perceptions of secondary agricultural education teachers in Michigan found that teachers rated supervising the occupational experiences of their students as the second most important roleactivity as secondary agricultural education teachers. The disconcerting aspect of the study was when teachers rated their execution of their roles, they rated supervising occupational experience programs as the least well conducted role in the secondary agricultural education program. The teachers seemed to be well aware of the importance of the program but for some reason they felt that they were not executing that part of the secondary agricultural education program as well as they were other parts of the program.

Both studies were helpful in pointing out the status of SOE in Michigan agricultural education. From the data presented it was apparent that the program in Michigan was changing. One of the questions that this raised was whether Michigan agricultural education was different than programs in other states. What was the status of SOE in agricultural education in other states and what was the future of this component in agricultural education? These were some of the questions that prompted the study of the opinions and supervised occupational experience programs of agricultural education teachers in the U.S.

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[4] Ibid., p. 206.

Methods

A random sample of 16 states were selected to be in the study. The states selected to be in the study are presented in Table 1. The sample included states from all regions of the country.

Table 1
States Selected To Be In The Study

State	Teachers In Sample	Teachers Returning Questionnaire	Percent
Alabama	5	3	60
Arizona	5	4	80
California	5	5	100
Colorado	3	3	100
Delaware	5	4	80
Iowa	5	3	60
Minnesota	5	4	80
New Hampshire	5	3	60
New Mexico	5	5	100
North Carolina	5	2	40
North Dakota	5	5	100
South Carolina	5	3	60
South Dakota	5	3	60
Tennessee	5	4	80
Utah	5	4	80
Wisconsin	5	4	80
Unknown	0	3	
Total	77	62	80.5%

State supervisors of agricultural education and agricultural teacher educators were asked to identify 5 teachers in their state with the best SOE program. The data in Table 1 shows that 77 teachers were identified to be in the sample.

A questionnaire (Appendix 1) was developed and submitted to a panel of agricultural educators to establish the validity of the instrument. A split halves reliability coefficient of .80 was obtained on the questionnaire.

The questionnaire was mailed in late September to teachers selected to be a part of the study. The teachers in the sample were asked to provide information on the status of their SOE program and to make projections about their SOE programs in the future. Fifty teachers, which were 65 percent of the teachers in the sample, returned the questionnaire after the first mailing.

The first week of November a second mailing was made to nonrespondents. The second mailing was able to increase the rate of response to 80.5 percent.

The data was analyzed using the Stat Pac statistical analysis program.

CHAPTER 2

RESULTS

The analysis of the data was first completed on the demographic aspect of the study. The data in Table 2 shows a wide range of age and experience of the teachers named to be the best SOE directors in their respective states. The average age of teachers in the study was 37 years with a range from 24-60 years. The age grouping with the most teachers in it was the 31 to 35 year old group with 20 teachers in it representing 32 percent of the respondents.

Table 2
Age and years of Experience of Teachers
(n=62)

Age of Teacher	f	%	Years of Experience	f	%
21-25	1	1.6	1-5	4	6.5
26-30	8	12.9	6-10	22	35.5
31-35	20	32.3	11-15	15	24.2
36-40	15	24.2	16-20	10	16.1
41-45	9	14.5	21-25	6	9.7
46-50	5	8.1	26.30	3	4.8
51-55	3	4.8	31-35	1	1.6
56-60	1	1.6	36-40	1	1.6
Total	62	100		62	100
Mean	37			14	
Range	24-60			3-37	

According to the data in Table 3 almost all of the respondents who were nominated as the best SOE instructors were male. The data indicated that 61 (98.4%) of the teachers responding to the survey were male. Only one respondent was female.

Table 3
Comparison Of Male And Female Distribution Of Respondents
n=62

	Frequency	Percent
Male	61	98.4%
Female	1	1.6%
Total	62	100 %

The programs represented in the study came from a wide spectrum of vocational agriculture programs. The data in Table 4 indicates that 43 (69%) of the programs of respondents of this study were in rural areas. Only 7 (13%) of the programs were located in urban and 11 (18%) were located in suburban areas.

Table 4
Location of the Vocational Agriculture Program
n=62

Location	f	Percent
Rural	43	69%
Urban	8	13%
Suburban	11	18%
Total	62	100%

According to the data in Table 5, 52 (84%) of the respondents taught in a production agriculture program. It should be noted the teachers in this category sometimes indicated they taught other agricultural areas in addition to production agriculture. Ornamental Horticulture was taught by 7 (11%) of the respondents and agriculture mechanics was taught by 3 (5%) of the respondents.

Table 5
Type of Vocational Agriculture Program of Respondents
(n=62)

Type of Program	f	Percent
Production Agriculture	52	84%
Ornamental Horticulture	7	11%
Agricultural Mechanics	3	5%
Total	62	100%

The agricultural education programs were most often located in comprehensive high schools. The data in Table 6 shows that 57 (93%) of the respondents in the study (93%) taught in programs located in

comprehensive high schools. Only 4 (7%) of the programs were located in area vocational centers.

Table 6
Type of School Where Vocational Agriculture Was Taught
(n=61)

Type of School	f	Percent
Area Vocational School	4	7%
Comprehensive High School	57	93%
Total	61	100%

The agricultural education programs were taught in a variety of size schools. The data in Table 7 show that the largest grouping with 25 (41.7%) of the programs was in the smallest schools in the study, those that ranged from 48-500 students in high school. The next highest category was in the 1001 to 1500 student category with 19 (31.7%) of the programs. The average size school was 815. The range was from 35 to 2,700 students.

Table 7
Size of School Where the Vocational Agriculture Program is Located
(n=60)

Size of School	f	Percent
48-500	25	41.7%
501-1000	11	18.3%
1001-1500	19	31.7%
1501-2000	2	3.3%
2001-2500	1	1.7%
2501-3000	2	3.3%
Total	60	100.0%
Mean 815		
Range 35 to 2700		

The average size vocational agriculture program was 100 students according to the data in Table 8. The agricultural education student grouping with the most agricultural education students was the 51 to 100 with 23 (32.1%) programs. The 101 to 150 size program had 15 (24.2%) programs.

Table 8
Size of Vocational Agriculture Program
(n=62)

Size of Vocational Agriculture Program		f	Percent
17-50		13	21.0%
51-100		23	37.1%
101-150		15	24.2%
151-200		5	8.1%
201-250		6	9.7%
Total		62	100.0%
Mean	100		
Range	17 to 250		

The teachers reported that approximately 91 percent of their students enrolled in vocational agriculture had supervised occupational experience programs. The data in Table 9 shows there is little variation between the four high school years in the percent of agricultural education students with SOE programs. Students enrolled in the 11th grade had the highest percentage with 96 percent of the students with programs. Students in the 9th grade had the lowest percentage of students with only 84% with SOE programs.

Table 9
Percentage of Students in Vocational Agriculture with Supervised Occupational Experience Programs

Category	9th	10th	11th	12th	Total
Percent With SOEP	84%	92%	96%	92%	91%
Percent With-Out SOEP	16%	8%	4%	8%	9%
Total	100%	100%	100%	100%	100%

The teachers were asked what percentage of their students had supervised farming, placement or school land laboratory as their primary SOE in each class. The data in Table 10 shows that all three SOE options were utilized.

Supervised farming was still the option most often selected by students in all four grades of vocational agriculture. Forty percent of the 9th graders, 46% of the 10th graders, and 46% of both the 11th and 12th graders utilized the supervised farming option as their SOE. Placement was the next most widely used SOE option. Twenty-two percent of the 9th graders, 28% of the 10th graders, 34% of the 11th graders and 36% of the 12th graders used the placement option to obtain their SOE. The option that was least utilized by students to obtain SOE was the school land laboratory. Sixteen percent of the 9th graders and 15% of the 10th graders, 11% of the 11th graders and 9% of the 12th graders utilized the school land laboratory to obtain their SOE.

Table 10
Vocational Agriculture Student Utilization of Supervised Occupational Experience Programs

Supervised Occupational Experience Option	9th	10th	11th	12th
Supervised Farming	40%	46%	47%	47%
Placement	22%	28%	34%	36%
Land Lab	16%	15%	11%	9%

One of the indicators of the value that teachers have of SOE is the weight they give this area when assigning grades to students. The data in Table 11 indicate that there was a wide variation in the percent of grade based on SOE. Ten (16.6%) of the teachers gave none of the grade based on SOE. The largest single group were 18 (30.5%) of the teachers who gave between 21% and 30% of the grade based on SOE. Four (6.8%) of the teachers gave the highest percentage of 41%-50% of the grade.

Table 11
Percentage of Student Grades Based on Their Supervised Occupational Experience Program
(n=59)

Percentage of Student Grades	f	Percent
0	10	16.9%
1-10	9	15.3%
11-20	15	25.4%
21-30	18	30.5%
31-40	3	5.1%
41-50	4	6.8%
Total	59	100.0%

The data in Table 12 indicate that 16 teachers (25.6%), the largest single group, visited the SOE program of their students

on the average of 2 times per year. The second largest group, 12 (19.4%), were teachers who visited their students 4 time a year. The lowest number of visits per year was 1 per student reported by 11 teachers (17.7%). One teacher reported visiting their students an average of 25 times per year.

Teachers visited their student's SOE program an average of 4 times per year. The median number of visits was 3 times a year. The range was from 1 to 25 times per year.

Table 12
Average Number of Visits of Students Supervised Occupational Experience Program by Teachers (n=62)

Average Number of Visits per Student	Number	Percent
1	11	17.7%
2	16	25.8%
3	11	17.7%
4	12	19.4%
5	3	4.8%
6	3	4.8%
7	4	6.5%
8	1	1.6%
9	1	1.6%
Total	62	100.0%

The teachers differed on which SOE program best facilitated learning under ideal conditions. The data in Table 13 shows that 36 (65.8%) of the respondents felt the supervised farming option under ideal conditions best facilitate student learning. Twelve (21.8%) of the teachers felt the placement program, under ideal conditions, best facilitated student learning. The land laboratory was least often cited as the option that best

facilitated learning with only 7 (12.7%) of the teachers selecting this option.

Table 13
Teacher's Opinion of the Supervised Occupational Experience Option their Working Conditions does the Least Effective Job of Training Students
(n=53)

Best SOE Option	Number	Percent
Land Laboratory	7	12.7%
Placement	12	21.8%
Supervised Farming	36	65.5%
Total	55	100.0%

The data in Table 14 indicated that 33 (62.3%) of the teachers felt that under their working conditions the land laboratory was the option that was the least effective in teaching students. The data also indicated that 13 (24.5%) of the teachers felt that the placement option was the least effective option under their conditions. Only 7 (13.2%) of the teachers felt the supervised farming option was the least effective option under their conditions.

Table 14
Teacher's Option of the Supervised Occupational Experience Option their Working Conditions does the Least Effective Job of Training Students
(n=53)

Least Effective SOE Option	Number	Percent
Supervised Farming	7	13.2%
Placement	13	24.5%
Land Laboratory	33	62.3%
Total	62	100.0%

Teachers were in strong agreement that SOE was more important in their program today than it had been in the past. The data in Table 15 showed that 54 (87%) of the teachers felt SOE was more important in their program today than it had been in the past. Only 8 (12.9%) of the teachers felt that SOE was not as important in their program today than it had been in the past.

Table 15
Teacher's Opinion of the Relative Importance of Supervised Occupational Experience in Their Program at the Present Time Compared to the Past
(n=62)

SOE is More Important Today Than in the Past	Number	Percent
No	9	12.9%
Yes	54	87.1%
Total	62	100.0%

The teachers responded, according to the data in Table 16, that SOE was emphasized more in their program now than it had been over the past few years. Most teachers, 34 (54.8%), felt SOE was emphasized more in their programs today than in the past. A smaller group, 22 (35.5%), felt they emphasized SOE about the same over the years. Only 6 (9.7%) of the teachers felt they emphasized SOE less in their programs today than in the past.

Table 16
Teachers Assessment of the Emphasis Placed on Supervised Occupational Experience Over the Past Few Years
(n=62)

Emphasis on SOE	Number	Percent
Less	7	9.7%
Same	22	35.5%
More	34	54.8%
Total	62	100.0%

Teacher's expected to put more emphasis on SOE in the future in their programs. The data in Table 17 indicated that 36 (59%) of the teachers predicted they would put more emphasis on SOE in the future. A fairly large number 23 (37.7%) of the teachers expected to emphasize SOE about the same in the future as they had in the past. Only 2 (3.3%) of the teachers predicted they would emphasize SOE less in the future.

Table 17
Teacher's Prediction of Future Emphasis on Supervised Occupational in Their Program
(n=61)

Teacher's Prediction of Future Emphasis on SOE	Number	Percent
Less Important	2	3.3%
Same Importance	23	37.7%
More Important	36	59.0%
Total	61	100.0%

The majority of the respondents in the study felt that SOE was being emphasized by other teachers of vocational agriculture in their states at the present time more than had been the case

in the past. Thirty-two (52.5%) of the teachers felt other agriculture teachers in their state were emphasizing SOE more now than in the past. However, 16 (26.2%) of the teachers felt other teachers in their state were emphasizing SOE less. Only 13 (21.3%) of the teachers felt the same emphasis was being placed on SOE by other teachers in their state now as compared to the past.

Table 18
Teacher's Opinion of the Relative Importance of Supervised Occupational Experience in Other Vocational Agriculture Programs in Their State now Compared to the Past
(n=61)

Other Agriculture Programs Emphasis on SOE	Number	Percent
Same Importance	13	21.3%
Less Important	16	26.2%
More Important	32	52.5%
Total	61	100.0%

The data in table 19 shows a majority of the respondents felt that SOE would be emphasized more by other teachers in their state in the future. Thirty-five (58.3%) of the teachers felt SOE would be emphasized more in the future by other teachers. A smaller group of 16 (26.7%) teachers felt other teachers would apply about the same emphasis in the future on SOE. Only 9 (15%) of the teachers predicted less emphasis on SOE by other teachers in the future.

Table 19
Teachers Prediction of Future Emphasis by Other Teachers in Their States on Supervised Occupational Experience
(n=60)

Other teachers predicted future emphasis on SOE	Number	Percent
Less important	9	15.0%
Same importance	16	26.7%
More important	35	58.3%
Total	60	100.0%

The analysis of the descriptive statistics revealed the need to look deeper at the data to determine the factors that were influencing the programs and opinions of teachers. The analysis of the variables revealed some significant differences. The data in Table 20 indicated that older teachers, 37-60 years of age, had 55.1% of their students in the supervised farming SOE option compared to 37.8% for younger teachers ages 24-36 years of age. The differences between the two groups produced an f statistic of 2.03 which was significant at the .04 level.

Table 20
Relationship of the Age of the Teacher to the Percent of Students in Each Occupational Experience Option
(n=58)

SOE Option	Age of Teacher Group 1 Age = 24-36 N=32	Group 2 Age = 37-60 N=26	t-statistic	p
Supervised Farming	37.8%	55.1%	2.03	.04*
Placement	31.2%	27.2%	.56	.58
Land Lab	16.8%	6.2%	5.59	.03*

* Probability is less than .05

Younger teachers had 31.2% of their students in the placement option compared to 27.2% for older teachers. The t statistic of .58 was not significant.

A chi square analysis in Table 21 revealed that when younger teachers were compared with older teachers there were significant differences on one variable. A chi square or 13.40 was significant at less than the .01 level on the teacher's prediction of future emphasis of other teachers in their state. Seventy four percent of younger teachers expect other teachers to put more emphasis on SOE in the future compared to 41.4% of the older teachers. In addition, only 6.5% of younger teachers expected other teachers to put the same amount of emphasis on SOE compared to 48.5% of older teachers.

Table 21
Comparison of Age of the Teacher with the Opinions of Teachers on Supervised Occupational Experience Programs (SOEP)
(N=55)

Factor	Age of Teacher 22-36 N=24	37-60 N=26	Chi Square	P.
1. Type of SOE under ideal condition that best facilitate student learning in their program.			.42	.80
a. Supervised Farming	65.5%	65.4%		
b. Placement	24.1%	19.2%		
c. Land Laboratory	10.3%	15.4%		
2. Under Teaching Working Condition Which SOEP is Least Effective.			1.22	.54
a. Supervised Farming	17.9%	8.0%		
b. Placement	21.4%	28.0%		
c. Land Laboratory	60.7%	64.0%		

Table 21--Continued

3.	Teaching Concept of the Importance of SOEP as a Part of their Program Today Compared with the Past.		1.78	.18
	a. More Important	93.9%	79.3%	
	b. Less Important	6.3%	20.7%	
4.	Teaching Concept of the Emphasis They Place on SOEP in Their Program now Compared to the Past.		3.66	.16
	a. More	60.6%	48.3%	
	b. Less	3.0%	17.2%	
	c. The Same	36.4%	34.5%	
5.	Teacher Prediction of Their Future Emphasis on SOEP.		4.48	.10
	a. More Emphasis	66.7%	50.0%	
	b. Less Emphasis	6.1%	0.0%	
	c. Some Emphasis	27.3%	50.0%	
6.	Teaching Concept of the Emphasis on SOEP by Other Teachers in Their State.		1.30	.52
	a. More Emphasis	59.4%	44.8%	
	b. Less Emphasis	21.9%	31.0%	
	c. Some Emphasis	18.8%	24.1%	
7.	Teaching Prediction of the Future Emphasis of SOEP by Other Teachers in Their State.		13.40	.00*
	a. More Emphasis	74.2%	41.4%	
	b. Less Emphasis	19.4%	10.3%	
	c. Same Emphasis	6.5%	48.3%	

*Significant difference

The data in table 22 shows there was a significant difference on one variable when the one way analysis was used to compare the two age groups. Older teachers had visited 70.4% of their students a second time during the year compared to 53.2% for younger teachers. The f statistic of 4.08 was significant at the .04 level.

Table 22
Comparison of Age of Teacher on Selected Supervised Occupational Experience Program (SOEP) Factors (n=58)

	Age of Teacher			
	N=29 24-36	N=29 37-60	f	p
1. Percent of grade based on SOEP	19.4%	19.1%	.00	.92
2. Average number of visits per student	3.1	5.1	3.15	.08
3. Number of hours spend the week of the survey on SOE	6.9	7.9	.16	.68
4. Percent of students visited once	85.0	89.8	.94	.66
5. Percent of students visited twice	53.2	70.4	4.08	.04*
6. Percent of students with recordbook	96.8	89.1	2.53	.11
7. Number enrolled in Vo Agriculture	93.5	104.1	.68	.50
8. Number of students with SOEP	86.8	89.3	.17	.85

* Significant difference

The next variable investigated was the effect of the years of teaching experience on the opinions and programs of teachers in the study. The t statistic indicated that indeed there was a significant difference between teachers with less experience, 3-11 years of experience, and teachers with more teaching experience, 12-37 years of experience. The data in Table 23 shows that teachers with less experience had 19.1% of their students in the land laboratory option compared to 4.7% for teachers more experienced. The t test statistic of 2.61 was significant at less than the .01 level.

There were no significant differences between teachers with less experience and more experienced teachers in the percentage

of students in the supervised farming and placement options.

Table 23
Relationship of the Years of Teaching Experience and to the Percent of Students in Each Occupational Option.
(N=57)

SOEP Option	Teaching Experience Group 1 3-11 yrs. N=29	Group 2 12-37 yrs. N=28	t statistic	p
Supervised Farming	38.4%	50.9%	1.47	.14
Placement	28.4%	31.4%	.38	.70
Land Lab	19.1%	4.7%	2.61	.00*

*Probability less than .05

The chi square statistic revealed there were significant difference between teachers with less experience and more experienced teachers on two variables. A chi square of 7.28 indicated there was a significant difference at the .02 level between the two groups on the emphasis they expected to put on SOE in their programs. Twenty-two (71%) of the teachers with less experience predicted they would emphasize SOE more in their programs in the future compared to 14 (46.7%) of more experienced teachers. Only 2 (6.5%) of the less experienced teachers reported they would emphasize SOE less compared to 0.0% of the more experienced teachers. Sixteen (53.3%) of the more experienced teachers indicated they expected to place the same emphasis on SOE in the future as in the past compared to 7 (22.6%) of the less experienced teachers.

The chi square of 11.34 indicated a significant difference

between the two groups of less than the .01 level. Twenty one (72.4%) of the lesser experienced teachers predicted more emphasis would be placed on SOE by other teachers in their state compared to 14 (45.2%) of the more experienced teachers. Six (20.7%) of the less experienced teachers expected other teachers in their state to put less emphasis on SOE in the future compared to 3 (9.7%) of the more experienced teachers. Fourteen (45.2%) of the less experienced teachers expected other teachers in their state to continue to place the same emphasis on SOE in the future as in the past compared to 2 (6.9%) of the teachers with less experience.

Table 24
Comparison of the Teaching Experience of the Teacher with the Opinions of Teachers on Supervised Occupational Experience Programs (SOEP).

Variable	Teaching Experience 6-15	15-30	Square	P
1. SOE option under ideal conditions that best facilitate student learning			1.90	.38
a. Supervised Farming	16(59.3%)	20(71.4%)		
b. Placement	8(29.6%)	4(14.3%)		
c. Land Laboratory	3(11.1%)	4(14.3%)		
Total	27(100%)	28(100%)		
2. Under Teachers Working Condition Which SOE Option is Least Effective			1.99	.37
a. Supervised Farming	5(19.2%)	2(7.4%)		
b. Placement	5(19.2%)	8(29.6%)		
c. Land Laboratory	16(61.5%)	17(63.0%)		
Total	26(100%)	27(100%)		

Table 24--Continued

3. Teachers Concept of the Option where the most Effective SOE takes place in their program.			2.62	.26
a. Supervised Farming	16(53.3%)	20(71.4%)		
b. Placement	11(36.7%)	5(17.9%)		
c. Land Laboratory	3(10.0%)	3(10.7%)		
Total	30(100%)	28(100%)		
4. Teachers Concept of the Importance of SOE as a Part of their Program Today Compared with the past			3.58	.06
a. More important	30(96.8%)	24(77.4%)		
b. Less important	1(3.2%)	7(22.6%)		
Total	31(100%)	31(100%)		
5. Teachers Concept of the Emphasis they place on SOE in their program now Compared to the past			3.90	.14
a. More emphasis	20(64.5%)	14(45.2%)		
b. Less emphasis	1(3.2%)	5(16.1%)		
c. The same emphasis	10(32.3%)	12(38.7%)		
Total	31(100%)	31(100%)		
6. Teacher's Prediction of their future emphasis on SOE			7.28	.02*
a. More emphasis	22(71.0%)	14(46.7%)		
b. Less emphasis	2(6.5%)	0(0.0%)		
c. The same emphasis	7(22.6%)	16(53.3%)		
Total	31(100%)	30(100%)		
7. Teacher's concept of the emphasis placed on SOE by other teachers in their state			4.90	.08
a. More emphasis	20(66.7%)	12(38.7%)		
b. Less emphasis	6(20.0%)	10(32.3%)		
c. Same emphasis	4(13.3%)	9(29.0%)		
Total	30(100%)	31(100%)		
8. Teacher's prediction of the future emphasis on SOE by other teachers in their state			11.34	.00*
a. More emphasis	21(72.4%)	14(45.2%)		
b. Less emphasis	6(20.7%)	3(9.7%)		
c. Same emphasis	2(6.9%)	14(45.2%)		
Total	29(100%)	31(100%)		

*Significant difference

A one way analysis of variance was used to analyze the remaining variables to determine if there were significant differences among the teachers based on years of teaching experience. The data in Table 25 revealed only one variable that was found to be significantly different. Teachers with more experience reported they had visited 72.3% of their students a second time during the year compared to 50.1% of the teachers with less experience. The f statistic of 7.21 was significant at less than the .01 level.

Table 25
Comparison of Teaching Experience of Teacher on Selected Supervised Occupational Experience Program(SOEP) Factors

	Teaching Experience			
	3-11 yrs. N=30	12-37 yrs. N=25	f	p
1. Percent of grade based on SOE	18.9%	19.7%	.05	.80
2. Average number of visits per student	3.1	5.0	2.64	.10
3. Number of hours spent on SOE the week of the survey	5.3	9.5	3.43	.06
4. Percent of students visited once	84.2%	90.3%	1.53	.21
5. Percent of students visited twice	50.1%	72.3%	7.21	.00*
6. Percent of students with recordbook	94.6%	91.9%	.30	.54
7. Number enrolled in Vo Ag	95.4	102.6	.45	.65
8. Number of students with a SOEP	86.3	91.2	.34	.73

* Significant difference

When the effects of the location of the program was analyzed

several significant differences were found. The data in Table 26 indicated an analysis of variance of the different percentage of students in the supervised farming SOE option produced an f statistic of 3.51 which was significant at the .03 level. Supervised farming was the option of 52.9% of students from programs in rural areas, 30.8% of students from programs in urban areas and 27.8% of students from suburban areas. The t tests were applied to determine specifically between which groups there were significant differences. A t score of 2.24 revealed the significant difference was between the students selecting the supervised farming option from programs in rural areas and the smaller percentage choosing the option from suburban areas.

The analysis of variance between the groups on the percentage of students selecting the land laboratory option produced a f statistic of 7.81 which was significant at less than the .01 level. The teachers from rural areas had only 5.4% of their students with the land laboratory option, 31.3% of students from urban areas selected the option and 22.7% of suburban students were in the option. The t test analysis to determine where significant difference existed revealed a t statistic of 3.49 between rural students and urban students which was significantly different at less than the .01 level. Additionally, a t statistic of 2.44 between rural students and suburban students was significant at the .01 level.

The analysis of variance did not detect any significant difference between the three program locations on the percentage of students choosing the placement option. It should be noted the

placement option was the largest single option with 40.9% of suburban students, the second largest option with 27.3% of rural students and had 26.7% of urban students.

Table 26
Comparison of Rural, Urban and Suburban Vocational Agriculture Programs with the Percentage of Students in Each Supervised Occupational Experience Option.

	N=58 Location of School				
SOEP	Group 1 Rural N=40	Group 2 Urban N=8	Group 3 Suburban N=10	f	p
Supervised Farming	52.9	30.8%	27.8%	3.51	.03*
Placement	27.3%	26.9%	40.9%	.89	.58
Land Laboratory	5.4%	31.3%	22.7%	7.81	.00+

* t = 2.24 Group 1
p = .02 Group 3

\+ t = 3.49 Group 1
p = .00 Group 2

t = 2.44 Group 1
p = .01 Group 3

An examination of the variables analyzed with the chi square statistic in Table 27 revealed two variables that indicated a significant difference between the groups based on location of the program. A chi square of 10.4 on the variable of the teacher's concept of the emphasis on SOE by other teachers in their state now compared to the past was significantly different at the .03 level. Twenty-five (62.8%) teachers from rural areas, 4 (57.1%) teachers from urban areas and only 3 (27.3%) teachers from suburban areas felt other teachers in their state were

emphasizing SOE more now than in the past. Seven (63.6%) teachers from suburban areas, 2 (28.6%) teachers from urban areas and 7 (16.3%) teachers from rural areas felt other teachers in their state were emphasizing SOE less now than in the past. Eleven (25.6%) teachers from rural areas, 1 (14.3%) from urban areas and 1 (9.1%) from suburban areas felt other teachers in their state were emphasizing SOE the same now as they had in the past.

A chi square of 14.2 indicated there was a significant difference among the teachers from different localities at the less than the .01 level. Twenty eight (65.1%) teachers from rural areas, 5 (62.5%) from urban areas and only 2 (22.2%) from suburban areas felt other teachers in their state would emphasize SOE more in the future. Five (55.6%) teachers from suburban areas, 1 (12.5%) from urban areas and 3 (7%) from rural areas felt other teachers in their state would emphasize SOE less in the future. Twelve (27.9%) teachers from rural areas, 2 (25%) from urban areas and 2 (22.2%) from suburban areas felt other teachers would emphasize SOE about the same in the future as they had in the past.

Table 27
Comparison of the Location of School with the Opinions of Teachers on Supervised Occupational Experience Programs (SOEP)

	Rural	Urban	Suburban	Square	P.
1. Type of SOEP Under Ideal Conditions That Best Facilitates Student Learning.				4.13	.38
a. Supervised Farming	28(70.0%)	4(57.1%)	4(50.0%)		
b. Placement	7(17.5%)	3(42.9%)	2(25.0%)		
c. Land Laboratory	5(12.5%)	0(0.0%)	2(25.0%)		
Total	40(100%)	7(100%)	8(100%)		
2. Under Teacher's Working Conditions Which SOEP is Least Effective				7.36	.11
a. Supervised Farming	3(7.7%)	1(16.7%)	3(37.5%)		
b. Placement	9(23.1%)	1(16.7%)	3(37.5%)		
c. Land Laboratory	27(69.2%)	4(66.7%)	2(25.0%)		
Total	39(100%)	6(100%)	8(100%)		
3. Teacher's Concept of the Option Where the Most Effective SOEP takes Place in their Program				7.35	.11
a. Supervised Farming	27(64.3%)	4(57.1%)	5(55.6%)		
b. Placement	12(28.6%)	3(42.9%)	1(11.1%)		
c. Land Laboratory	3(7.1%)	0(0.0%)	3(33.3%)		
Total	42(100%)	7(100%)	8(100%)		
4. Teacher's Concept of the Importance of SOE as a part of Their Program Today Compared with the Past					
a. More Important	37(86.0%)	7(87.5%)	10(90.9%)		
b. Less Important	6(14.0%)	1(12.5%)	1(9.1%)	.18	.91
Total	43(100%)	8(100%)	11(100%)		
5. Teacher's Concept of the Emphasis They Place on SOE in Their Program now Compared to the Past.				8.21	.00*
a. More	27(62.8%)	3(37.5%)	4(36.4%)		
b. Less	3(7.0%)	0(0.0%)	3(27.3%)		
c. The Same	13(30.2%)	5(62.5%)	4(36.4%)		
Total	43(100%)	8(100%)	11(100%)		

Table 27--Continued

6. Teacher's Prediction of Their Future Emphasis on SOE				4.71	.31
a. More Important	28(65.1%)	4(57.1%)	4(36.4%)		
b. Less Important	2(4.7%)	0(0.0%)	0(0.0%)		
c. Some Importance	13(30.2%)	3(42.9%)	7(63.6%)		
Total	43(100%)	7(100%)	11(100%)		
7. Teacher's Concept of the Emphasis on SOE by Other				10.4	.03*
a. More Emphasis	25(58.1%)	4(57.1%)	3(27.3%)		
b. Less Emphasis	7(16.3%)	2(28.6%)	7(63.6%)		
c. Some Emphasis	11(25.6%)	1(14.3%)	1(9.1%)		
Total	43(100%)	7(100%)	11(100%)		
8. Teacher's Prediction of the Future Emphasis on SOE by Other Teachers in Their State				14.2	.00*
a. More Emphasis	28(65.1%)	5(6.2%)	2(22.2%)		
b. Less Emphasis	3(7.0%)	1(12.5%)	5(55.6%)		
c. Some Emphasis	12(27.9%)	2(25.0%)	2(22.2%)		
Total	43(100%)	8(100%)	9(100%)		

*Significant differences

The analysis of other SOE factors listed in Table 28 failed to identify any significant differences based on the location of the vocational agriculture program.

Table 28
Comparison of School Location on Selected Supervised Occupational Experience Programs (SOEP)

	School Location N=40 Rural	N=8 Urban	N=10 Suburban	f	p
1. Percent of grade based one SOEP	19.4%	18.7%	19.3%	.00	.99
2. Average number of visits to students the week of survey	4.0	5.2	3.3	.38	.68
3. Number of hours spent on SOE by the teacher the week of survey	7.7	8.5	5.1	.41	.66
4. Percent of students visited once	89.2%	78.7%	86.0%	1.01	.37
5. Percent of students visited twice	63.9%	48.7%	60.1%	.66	.52
6. Percent of students who keep a recordbook	94.8%	96.8%	83.5%	1.63	.20
7. Enrollment in Vo Ag	94.0	121.1	97.5	.69	.51
8. Number of students with SOEP	84.6	106.1	86.9	.54	.58

The data in Table 29 revealed there were no significant differences between the SOE option selected by students in area vocational centers and those taught in a comprehensive high school.

Table 29
Comparison of Type of School with the Percent of Students in Each Occupational Experience Option

SOE Option	Type of School: Group 1 Area Vocational Center N=4	Group 2 Comprehensive School N=53	t Statistic	p
Supervised Farming	44.1%	46.5%	.13	.88
Placement	42.1%	27.8%	1.04	.30
Land Laboratory	2.1%	12.0%	.90	.62

The chi square statistic was used to analyze the data in Table 30. Only one variable was found to be significantly different between area vocational centers and comprehensive high schools. A chi square of 7.64 was significant at the .02 level on the opinions of teachers from the two schools on the SOE option, under the teachers working conditions that was least effective. Thirty three (67.3%) teachers from comprehensive high schools listed land laboratory as least effective under their working conditions. Three (75%) of teachers from area centers rated the placement option as least effective under their condition compared to 10 (20.4%) of teachers from comprehensive high schools. Only 1 (25%) of area center teachers rate the supervised farming in SOE option as least effective under their condition compared to 6 (12.2%) of teachers from comprehensive high schools.

Table 30
Comparison of the Type of School Teachers Teach at With the Opinion of Teachers about Supervised Occupational Experience Program (SOEP)

Variable	Type of School: Area Vocational	Type of School: Comprehensive High School	Chi Square	p
1. Type of SOEP under ideal conditions that best facilitate student learning			.68	.78
a. Supervised farming	2(50.0%)	34(66.7%)		
b. Placement	1(25.0%)	11(21.6%)		
c. Land Laboratory	1(25.0%)	6(11.8%)		
Total	4(100%)	51(100%)		
2. Under the teacher's working conditions which SOE is least effective?			7.64	.02*
a. Supervised farming	1(25.0%)	6(12.2%)		
b. Placement	3(75.0%)	10(20.4%)		
c. Land Laboratory	0(0.0%)	33(67.3%)		
Total	4(100%)	49(100%)		
3. Teacher's Concept of the option where the most effective SOE takes place in their program.			2.5	.28
a. Supervised farming	2(66.7%)	34(61.8%)		
b. Placement	0(0.0%)	16(29.1%)		
c. Land Laboratory	1(33.3%)	5(9.1%)		
Total	3(100%)	55(100%)		
4. Teacher's Concept of the importance of SOEP as a part of their program today compared with the past.			.00	.97
a. As Important	4(100.0%)	49(86.0%)		
b. Less Important	0(0.0%)	8(14.0%)		
Total	4(100%)	57(100%)		

Table 30--Continued

5. Teacher's concept of the emphasis they place on SOEP in their program now compared to the past.			1.15	.56
a. More emphasis	2(50.0%)	31(54.4%)		
b. Less emphasis	1(25.0%)	5(8.8%)		
c. Same emphasis	1(25.0%)	21(36.8%)		
Total	4(100%)	57(100%)		
6. Teacher's prediction of the future emphasis on SOEP.			.42	.81
a. More emphasis	2(50.0%)	34(60.7%)		
b. Less emphasis	0(0.0%)	2(3.6%)		
c. Same emphasis	2(50.0%)	20(35.7%)		
Total	4(100%)	56(100%)		
7. Teacher's concept of the emphasis on SOEP by other teachers in their state.			.02	.98
a. More emphasis	2(50.0%)	29(51.8%)		
b. Less emphasis	1(25.0%)	15(26.8%)		
c. Same emphasis	1(25.0%)	12(21.4%)		
	4(100%)	56(100%)		
8. Teacher's prediction of the future emphasis on SOEP by other teachers in their state.			.33	.84
a. More emphasis	2(50.0%)	33(60.0%)		
b. Less emphasis	1(25.0%)	8(14.5%)		
c. Same emphasis	1(25.0%)	14(25.3%)		

*Significant difference

The analysis of variance was used to test for differences between the types of schools on a selected group of factors in Table 31. Only one variable was found to have significant differences between the two types of schools. An f value of 4.01 was significant at the .04 level on the variable the percent of students who keep a record book. Only 75% of students in area centers kept a record book compared to 94% for students in comprehensive high schools.

Table 31
Comparison of Type of School on Selected SOE Factors

	Type of School			
	Area Center N=30	Comprehensive N=27	f	p
1. Percent of grade based on SOE.	17.5%	19.6%	.09	.75
2. Average number of visits to students the week of the survey.	7.7	3.8	2.7	.10
3. Number of hours spent on SOE the week of the survey.	4.0	7.7	.60	.55
4. Percent of students visited once.	100%	87.1%	1.74	.18
5. Percent of students visited twice.	87.5%	60.1%	2.47	.11
6. Percent of students who keep a record book.	75%	94%	4.01	.04*

*Significant difference

The analysis of data in Table 32 revealed a great deal of difference between the type of agriculture taught and the SOE option selected by students in the program. There was significant difference found in the type of agricultural program on the use of the supervised farming option and the land laboratory option.

An f value of 4.69 was significant as the .01 level among the three types of agriculture programs in the use of supervised farming. A t test analysis revealed the significant difference was between production agriculture with 50.1% of its students with the supervised farming option and the ornamental horticulture option with 11.7% of it's students in the option.

An f value of 10.8 was significant at less than the .01 level among the three types of agriculture programs in the use of the land laboratory option. A t test analysis revealed the significant differences were between ornamental horticulture with 41.8% of its students in the land laboratory option and agriculture mechanics with 0% of their students in the land laboratory option.

It should be noted that even though there was not a significant difference between production agriculture and ornamental horticulture there were wide differences in the use of the land laboratory option. Only 7.9% of students in production agriculture used the land laboratory as their SOE option compared to 41.8% of students in ornamental horticulture.

Table 32
Comparison of Type of Vocational Agriculture Program with the Percent of Students in Each Occupational Experience Option

	N=57 Type of Vo Ag Program				
SOEP Option	Group 1 Production N=47	Group 2 Ornamental Horticulture N=7	Group 3 Agricultural Mechanics N=2	f statistic	p
Supervised Farming	50.1%	11.7%	50.8%	4.69	.01*
Placement	27.6%	36.1%	48.8%	.77	.52
Land Laboratory	7.9%	41.8%	0%	10.85	.00+

* t = 4.56 Group 1
p = .00 Group 2

\+ t = 2.85 Group 2
p = .02 Group 3

The chi square was used to analyze the data in Table 33. Significant differences were found among the different types of vocational agriculture programs on two variables.

A chi square of 9.71 was significant at the .04 level indicating a significant difference among the different types of vocational programs on the SOE option teacher's felt was least effective under their working conditions. Only 4 (8.7%) production agriculture teachers felt the supervised farming program was least effective under their conditions compared to 2 (40%) of the ornamental horticulture teachers and 1 (50%) of the agricultural mechanics teachers. Ten (21.7%) production agriculture teachers felt the placement program was the most effective SOE option under their working conditions compared to 2 (40%) of ornamental horticulture teachers and 1 (50%) of agricultural mechanics teachers. Most of the production agriculture teachers, 32 (69.6%), felt the land laboratory option was least effective under their working conditions compared to 1 (20%) for ornamental horticulture teachers and no agricultural mechanics teachers.

The second variable in which a significant difference was found among the different types of vocational agriculture programs was on the teachers concept of the emphasis they expect to place on SOE in the future. A chi square of 13.09 was significant at the .01 level.

Most of the production agriculture teachers, 30 (58.8%), and the ornamental horticulture teachers, 6 (85.7%), felt they would emphasize SOE more in the future, while no agricultural mechanics felt that way. Most agricultural mechanics teachers, 2 (66.6%), felt they would continue their present rate of emphasis on SOE compared to 18 (34.6%) of production teachers and 2 (28.6%) of agricultural mechanics teachers. A minority of teachers, 1 (2.0%), of production teachers, none of the ornamental horticulture teachers and 1 (33.3%) of the agricultural mechanics teachers felt they would emphasize SOE less in the future.

Table 33
Comparison of the Type of Agriculture Program Teachers Teach with the Opinions of Teachers About Supervised Occupational Experience Programs (SOEP)

Variable	Type of Program			Chi Square	p
	Production	Ornamental Horticulture	Agriculture Mechanics		
1. Type of SOEP under ideal conditions that best facilitate student learning				2.80	.59
a. Super. Farming	33(68.8%)	2(40.0%)	1(50.0%)		
b. Placement	9(18.8%)	2(40.0%)	1(50.0%)		
c. Land Laboratory	6(12.5%)	1(20.0%)	0(0.0%)		
Total	46(100%)	5(100%)	2(100%)		
2. Under the teacher's working conditions which SOEP is least effective				9.71	.04*
a. Super. Farming	4(8.7%)	2(40.0%)	1(50.0%)		
b. Placement	10(21.7%)	2(40.0%)	1(50%)		
c. Land laboratory	32(69.6%)	1(20.0%)	0(0.0%)		
Total	46(100%)	5(100%)	2(100%)		

Table 33--Continued

3. Teachers concept of the option where the most effective SOEP takes place in their program				4.91	.29
a. Super. Farming	33(64.7%)	2(33.3%)	1(100%)		
b. Placement	14(27.5%)	2(33.3%)	0(0.0%)		
c. Land laboratory	4 (7.8%)	2(33.3%)	0(0.0%)		
Total	51(100%)	6(100%)	1(100%)		
4. Teachers concept of the importance of SOEP as a part of their program today, compared with the past				1.76	.41
a. As important	44(84.6%)	7(100.)	3(100%)		
b. Less important	8(15.4%)	0(0.0%)	0(0.0%)		
Total	52(100%)	7(100%)	3(100%)		
5. Teachers concept of the emphasis they place on SOEP in their program now compared to the past				4.75	.31
a. More emphasis	30(57.7%)	4(57.1%)	0(0.0%)		
b. Less emphasis	4(7.7%)	1(14.3%)	1(33.3%)		
c. Same emphasis	18(34.6%)	2(28.6%)	2(66.7%)		
Total	52(100%)	7(100%)	3(100%)		
6. Teacher's prediction of the future emphasis on SOEP in their program				13.09	.01*
a. More emphasis	30(58.8%)	6(85.7%)	0(0.0%)		
b. Less emphasis	1(2.0%)	0(0.0%)	1(33.3%)		
c. Same emphasis	20(39.2%)	1(14.3%)	2(66.7%)		
Total	51(100%)	7(100%)	3(100%)		
7. Teacher's concept of the emphasis on SOEP by other teachers in their state				7.11	.13
a. More emphasis	27(51.9%)	5(83.3%)	0(0.0%)		
b. Less emphasis	14(26.9%)	1(16.7%)	1(33.3%)		
c. Same emphasis	11(21.2%)	0(0.0%)	2(66.6%)		
Total	52(100%)	6(100%)	3(100%)		
8. Teachers prediction of the future emphasis on SOEP by other teachers in their state				7.86	.09
a. More emphasis	31(60.8%)	4(66.7%)	0(0.0%)		
b. Less emphasis	6(11.8%)	1(16.7%)	2(66.0%)		
c. Same emphasis	14(27.5%)	1(16.7%)	1(33.3%)		

*Significant difference

The analysis of variance was used to analyze the variables in Table 34. Only one variable was found to be significant among the remaining selected SOE variables. An f value 3.62 was significant at the .03 level on the percent of students who kept a record book. The t test was used to determine which programs were significantly different from one another.

A t score of 2.51 indicated their was a significant difference at the .01 level between production teachers with 94% of their students who kept a record book and agricultural mechanics teachers who had only 66% of their students keeping record books. A t score of 2.57 also revealed a significant, difference at the .03 level between ornamental horticulture teachers who had 100% of their students keeping record books and agricultural mechanics.

Table 34
Comparison of the Type of Vocational Agriculture Programs with Selected Supervised Occupational Experience Factors

	Type of Program				
	n=49	n=7	n=5		
	Production	Ornamental	Mechanics	f	p
1. Percent of grade based on SOE	18.8%	18.5%	13.3%	.34	.71
2. Average number of visits to students per year	3.8	4.0	9.0	1.85	.16
3. Number of hours spent on SOE the week of survey	8.0	5.0	3.0	.69	.50
4. Percent of students visited once	88.0%	80.7%	90.0%	.46	.63
5. Percent of students visited twice	61.7%	60.0%	56.6%	.03	.96
6. Percent of students who keep a record book	94.0%	100.0%	66.6%	3.62	.03*

*t=2.51 Production X Agricultural Mechanics
p=.01

t=2.57 Ornamental Horticulture X Agricultural Mechanics
p=.03

A t test was used to look for significant differences in the data in Table 35 on the relative use of the three SOE options by schools of different sizes. The land laboratory option was the only SOE option where a significant difference could be detected. A t score of 2.94 by teachers in smaller schools (35-750 students) with 4.4% of their students in the land laboratory option was significantly lower at less than the .01 level than

larger schools (751-2700 students) with 20.6% of students in the option.

Table 35
Comparison of Size of School with the Percent of Students in Each Occupational Experience Option.

	N=55 School Size			
SOE Option	Group 1 35-750 N=28	Group 2 751-2700 N=26	t statistic	p
Supervised Farming	50.8%	38.5%	1.39	.16
Placement	32.4%	27.6%	.66	.51
Land Laboratory	4.4%	20.6%	2.94	.00*

* Probability less than .05

A chi square was used to examine the options of teachers in SOE. The results of the chi square tests are reported in Table 36. No significant differences were found between vocational agriculture teachers from different size schools in their opinions about SOE.

Table 36
Comparison of Teachers Opinions from Different Size Schools About Supervised Occupational Experience Programs (SOEP).

Variable	Size of School 35-750	751-2700		
1. Type of SOEP under ideal conditions that best facilitates student learning			2.59	.27
a. Supervised farming	21(72.4%)	14(56.0%)		
b. Placement	4(13.8%)	8(32.0%)		
c. Land laboratory	4(13.8%)	3(12.0%)		
Total	29(100%)	25(100%)		
2. Under the teacher's working conditions, which SOEP is least effective?			.59	.74
a. Supervised farming	3(10.7%)	4(16.7%)		
b. Placement	6(21.4%)	6(25.0%)		
c. Land laboratory	19(67.9%)	14(58.3%)		
Total	28(100%)	24(100%)		
3. Teacher's concept of the option where the most effective SOEP takes place in their program.			1.01	.60
a. Supervised farming	19(63.3%)	16(59.3%)		
b. Placement	9(30.0%)	7(25.9%)		
c. Land laboratory	2(6.7%)	4(14.8%)		
Total	30(100%)	27(100%)		
4. Teacher's concept of the importance of SOEP as a part of their program today, compared with the past.			.27	.63
a. As important	28(90.3%)	24(82.8%)		
b. Less important	3(9.7%)	5(17.2%)		
Total	31(100%)	29(100%)		
5. Teacher's concept of the emphasis they place on SOEP in their program now, compared to the past.			1.10	.57
a. More emphasis	18(58.1%)	14(48.3%)		
b. Less emphasis	2(6.5%)	4(13.8%)		
c. Same emphasis	11(35.5%)	11(37.9%)		
Total	31(100%)	29(100%)		

Table 36--Continued

6. Teacher's prediction of the future emphasis on SOEP in their program.			2.29	.31
a. More emphasis	19(61.3%)	16(57.1%)		
b. Less emphasis	2(6.5%)	0(0.0%)		
c. Some emphasis	10(32.3%)	12(42.9%)		
Total	31(100%)	28(100%)		
7. Teacher's concept of the emphasis on SOEP by other teachers in their state.			5.32	.07
a. More emphasis	16(51.6%)	15(53.6%)		
b. Less emphasis	5(16.1%)	10(35.7%)		
c. Some emphasis	10(32.3%)	3(10.7%)		
Total	31(100%)	28(100%)		
8. Teacher's prediction of the future emphasis on SOEP by other teachers in their state.			4.18	.12
a. More emphasis	20(64.5%)	14(51.9%)		
b. Less emphasis	2(6.5%)	7(25.9%)		
c. Some emphasis	9(29.0%)	6(22.2%)		
Total	31(100%)	27(100%)		

An analysis of selected SOE factors reported in Table 37 revealed no further differences between the activities of teachers from different size schools.

Table 37
Comparison of the Size of High Schools on Selected SOE Factors.

	Size of School			
	35-750 N=30	751-2700 N=27	f	p
1. Percent of grade based on SOEP	20.5%	18.1%	.41	.52
2. Average number of visits by teacher the week of survey	4.6	3.5	.77	.61
3. Number of hours spent on SOE by teachers the week of survey	6.7	8.1	.32	.57
4. Percent of students visited once	88.4%	85.4%	.36	.55
5. Percent of students visited twice	62.5%	59.0%	.15	.70
6. Percent of students who keep a recordbook	95.4%	90.1%	1.08	.30

The data in Table 38 was analyzed using a t test to determine whether there were significant differences between the size of the vocational agriculture program and the SOE option used by students. Significant differences were found in two of the three SOE options.

A t score of 2.84 was significant at less than the .01 level indicating a significant difference between smaller vocational agriculture programs (17-90 students) and larger programs 991-250 students) in the percentage of students the supervised farming option. Smaller programs had 56.5% of their students in the supervised farming option compared to 32.7% for teachers from larger vocational agriculture programs.

A t score of 3.09 was significantly different at less than the .01 level between larger and smaller vocational agriculture program in the use of the land laboratory option. The smaller vocational agriculture programs had only 4.3% of students in the land laboratory option compared to 20.8% of students in larger vocational agriculture programs.

Table 38
Comparison of Size of Vocational Agriculture Program to the Percent of Students in Each Occupational Experience Option.

SOE Option	Size of Vo Ag Program Group 1 17-90 N=30	Group 2 91-250 N=26	t statistic	p
Supervised farming	56.5%	32.7%	2.84	.00*
Placement	27.3%	31.6%	.59	.56
Land Laboratory	4.3%	20.8%	3.09%	.00*

* Probability less than .05

The chi square was used to examine the opinions of teachers from different size vocational agriculture programs to determine if there were significant differences. An examination of the data in Table 39 indicated that teachers from different size vocational agriculture programs only differed significantly on one variable.

A chi square value of 7.89 was significant at the .01 level between teachers of different size vocational agriculture programs on the teachers expectation of future emphasis on SOE by other teachers in their state. Nineteen (61.3%) of the teachers from smaller vocational agriculture programs expected other teachers to put more emphasis in the future on SOE compared to 16 (55.2%) of teachers from larger schools. Only 1 (3.2%) of the teachers from smaller schools expected other teachers in their state to emphasize SOE less in the future compared to 8 (27.6%) of teachers from larger vocational agriculture programs. Eleven (35.5%) of teachers from smaller schools expected other teachers

in their state to emphasize SOE about the same in the future as they had in the past compared to 5 (17.2%) of teachers from larger schools.

Table 39
Comparison of Teachers Opinions from Different Size Vocational Agriculture Programs about Supervised Occupational Experience (SOE).

Variable	Voc. Ag. Programs 15-90	Voc. Ag. Programs 91-200	Chi Square	p.
1. Type of SOE under ideal conditions that best facilitates student learning.			3.83	.14
a. Supervised farming	23(76.7%)	13(52.0%)		
b. Placement	4(13.3%)	8(32.0%)		
c. Land laboratory	3(5.5%)	4(7.3%)		
Total	30(100%)	25(100%)		
2. Under the teacher's working conditions which SOEP is least effective			.64	.72
a. Supervised farming	3(10.3%)	4(16.7%)		
b. Placement	8(27.6%)	5(20.8%)		
c. Land laboratory	18(62.1%)	15(62.5%)		
Total	29(100%)	24(100%)		
3. Teachers concept of the option where the most effective SOE takes place in their program.			1.84	.39
a. Supervised farming	22(68.8%)	14(53.8%)		
b. Placement	8(25.0%)	8(30.8%)		
c. Land laboratory	2(6.3%)	4(15.4%)		
Total	32(100%)	26(100%)		
4. Teacher's concept of the importance of SOE as a part of their program today, compared with the past.			.07	.77
a. As important	28(87.5%)	26(86.7%)		
b. Less important	4(12.5%)	4(13.3%)		
Total	32(100%)	30(100%)		

Table 39--Continued

5. Teacher's concept of the emphasis they place on SOE in their program now, compared to the past.			1.07	.58
a. More emphasis	19(59.4%)	15(50.0%)		
b. Less emphasis	2(6.3%)	4(13.3%)		
c. Some emphasis	11(34.4%)	11(36.7%)		
Total	32(100%)	30(100%)		
6. Teacher's prediction of the future emphasis on SOE in their program.			3.37	.18
a. More emphasis	21(67.7%)	15(50.0%)		
b. Less emphasis	0(0.0%)	2(6.7%)		
c. Some emphasis	10(32.3%)	13(43.3%)		
Total	31(100%)	30(100%)		
7. Teacher's concept of the emphasis on SOE by other teachers in their state.			2.05	.35
a. More emphasis	18(56.3%)	14(48.3%)		
b. Less emphasis	6(18.8%)	10(34.5%)		
c. Same emphasis	8(25.0%)	5(17.2%)		
Total	32(100%)	29(100%)		
8. Teacher's prediction of the future emphasis on SOE by other teachers in their state.			7.89	.01*

*Significant difference

The analysis of the remaining SOE factors was reported in Table 40. The analysis of variance revealed only one variable in which a significant difference could be found based on the relative size of the vocational agriculture program.

An f value of 4.76 was significantly different at the .03 level on the percent of students visited twice. Teachers from smaller vocational agriculture programs visited 70.1% of their students twice compared to 51.8% of teachers from larger programs.

Table 40
Comparison of the Number of Students in Vocational Agriculture on Selected SOE Factors.

	Size of Vo Ag Dept. 17-90 N=32	90-250 N=29	f	p
1. Percent of grade based on SOEP	20.3%	18.3%	.34	.56
2. Average number of visits by teacher to students per year	3.9	4.2	.07	.77
3. Number of hours spent on SOE by teachers the week of survey	8.4	6.2	.85	.63
4. Percent of students visited once	90.2%	84.2%	1.49	.22
5. Percent of students	70.1%	51.8%	4.76	.03*
6. Percent of students who keep a recordbook	95.8%	90.5%	1.15	.28

* t = 2.18 Group 1 17-90 students
p = .03 Group 2 90-250 students

The teachers were asked to respond to three open end questions. The first question in the open ended responses was, "To what factors do you attribute your success in making SOEP work in your school?" The following quotes were the reaction of teachers:

> A firm understanding of the requirements between the teacher, student and parents concerning the SOE program. And also a good slide presentation of each student's project.
>
> Students earn dollars.
>
> Devoting enough class time to make students understand the whole program and expected outcome and provide time for planning and replanning.
>
> As I stated above the purpose of the SOE is to develop those competencies needed on the job. However, we can accomplish this task is what we do. It depends greatly on the student, his resources, interests, available work stations and the like.

Insisting that it must happen.

(a) Rural community; (b) Program requirement that is supported by administration.

Students who understand the importance of SOEP and parents who also understand its importance and are willing to help their children.

Requiring records and teaching farm management (economics).

Requirement as part (20%) of student's grade.

Coop. program for students that go to school 1/2 day and work 1/2 day.

Mandatory part of the class, counting 20% of their grade. Former students talking about how "Mr. Harcums" took me home to see my project. They love it.

Hard work/ understanding your obj./ FFA advisor/ Alumni/ Support with parents/teacher/students.

Success of others SOE programs.

Tenure, student records on SOEP, Instructor persistence,parental backing

Discussing SOE projects in class, requiring the students to have an SOE, requiring record books to be kept by students, we use FFA incentives to reward the SOE projects.

Integral part of curriculum are positive reinforcement for success and recognition.

Need for adequate records and to earn degrees and awards.

Well equipped shop, greenhouse, shade house, livestock facilities. Excellent support for our students in our coop. I have been in this department for 27 years.

I have students with parents involved in production agriculture.

My belief in the program and we give 1 credit to juniors and seniors who have work experience and 1 credit to those who have farming program.

Teacher hustle to find SOEP station for wages of volunteer work. Extended contracts are being cut. Good possibility less time for SOEP will be available in the future.

Student interest.

Incentive at proficiency awards and FFA degrees.

Make it a requirement of every vo ag student. Meet with the parents as a group about the importance of SOE programs. Reward members and students for work in SOE.

Support from parents in the community. This is a 55 year old program and tradition has made SOEP a very important part of the vo ag program.

Freshman orientation to the program. Continued instruction from time to time.

Hard work, active student's parent support.

Requirement, awards, recognition

Teacher commitment to value of SOEP. Student acceptance. A unit of instruction is given to explain the program. Assistance is given to plan individual programs.

Grading it, continuity, State Farmer Degrees earned, proficiency awards.

Degree program available through FFA.

1. I require an SOE as part of their grade. 2. Incentive programs such as proficiency awards and state farmer degrees help a lot. 3. Peer pressure from class members and older brothers and sisters has proven helpful. 4. The ability to make money for themselves on their SOE projects is a major selling point. 5. Farm visits not only with the students but with the parents also helps sell the program and reinforce it.

Having the majority of students living on the farm.

Tradition.

Working with parents to plan projects they all can benefit from. Officers have a potluck meeting with parents to explain SOEP.

Require every student to have a SOEP program to get a credit in the course, base awards and degree

Parents, vo-ag teacher visits, principal, administration, alumni.

I personally am committed to the program--others in the department are not.

On site visits--interaction with student-parent-employer.

1. SOE unit taught in class every yr. 2. Graded at quarter (10% of grade). 3. Stressed often. 4. Tied to FFA degree and prof. achievement. 5. Award given for best record book.

1. SOEPs are stressed from the standpoint of hands on experience or the practical training outside the classroom. 2. Twenty-five percent of their grade is based on the SOEP. 3. Part of the point system for awards includes the SOEP.

Farm and home visitation.

The SOE is required. Time is spent in class working on record books and developing projects.

Offering SOEP for high school credit, installing a local proficiency cash award program. Slides taken of each local student's program and shown during SOEP class. FFA-FmHa youth loan program.

This was set-up in business in 1978 with the help of business people, bankers, lawyers, professional agricultural businessmen.

Individual SOEs based upon the student's occupational goal in ag. Students must develop a long range SOE plan for all four years.

1. Outstanding placement centers. 2. Success in FFA proficiency awards program.

By emphasizing the point that the practical application of the job are just as important as skills learned in class. We have a limited shop-lab-equipment so much practical experience is gained on the job.

Our land lab has been most effective. The renewed interest in working with the soil and gardening has made our vegetable garden very successful.

Cory's technique.

Award programs, supervised visits, records, credit.

Good students and excellent leadership on the part of passed students.

Instructor must make it work.

Making it an important part of the grade, stressing credit for things that some students are already doing, skills obtained by doing SOEs help in many areas later in life.

1. Required part of vo-ag classes. 2. Making adequate project visits. 3. Encourage project competition sponsored by Bank of America with awards and incentives.

Parent and alumni support, award program.

Placement opportunities.

Combining SOEP with the classroom and getting to new students early to get them started.

The second open ended question teachers responded to was "What is your biggest problem making SOEP work in your school?" The following quotes are the teachers responses:

Records to a certain extent, this is not much of a problem though.

Meeting competency needs of students outside program direction. Students lack opportunities to learn in occupations desired.

Developing in the students the ability to think ahead plan and carry through on their plans.

Lack of supervised farming--Host SOEP at school.

1. Small enrollment of school causes the same student to do many different activities and the coordination is the most difficult.

Young freshmen and sophomore students who have problems getting jobs in the summertime because of their age.

Time and scheduling.

Getting students new to the program off to a quick start.

Many academic students take an ag class for an elective and do not want to be involved in SOEP.

Finding time for visitations. School administrators fail to see the importance of these visitations. To this I must also add that the schedule is very tight, making it hard for administrators to allow a fair period for visitations. Most visitations are after school and on Saturdays.

Money/time.

The economy, it reduces size and growth of project.

Record books (but it is minor).

Not enough time for visiting students.

Individual opportunities for students.

Town students.

85% of our students live in town.

No big problems.

The poor economic conditions of some families and of the agricultural industry.

Lack of paid contract time. Large student enrollment.

The time to work individually, finding the time.

Everyone cannot have a project.

It takes extra time on my part besides teaching six classes each day and money isn't as easy for students to come by for programs. We have gone through 4 years of drought in this area.

Record keeping. It has been difficult to get some students motivated to keep their records up-to-date.

Migrant students--difficult to set up good SOEP when student is in the program for short time.

Get ag SOEP hour during the day to work with students.

Time--lack of it. Getting instruction and FFA in with it.

Student inertia.

Getting the student to complete the record book.

The tight margin profits which exist in agriculture today.

The occasional student who doesn't have a project possibility but I usually am able to help guide him or her to a potential employer and/in some cases I have helped set up a local experience program.

Having the parents share income with the students.

Lose some students by making requirements.

Scheduling. Those students who are in Vo-Ag for their first year as juniors or seniors are hard, if not impossible to get started.

Time of a teacher to supervise programs. Number of students with opportunities.

Not a farming area.

Support of other teachers is lacking.

Money for production ag. Finding good training stations for placement.

All urban students--especially difficult w/ 9th and 10th graders.

Presently we have 15 farm students out of 101 enrolled in the vo-ag classes. It is harder to develop SOEP programs with non-farm students. The non-farm students need a harder sell in developing their SOEPs.

Finding projects for each student. Record books are not always up to date.

Time--too many students for one instructor to do a good job.

None

Needs more agricultural teachers at this school; this school has an enrollment of 1400 students and one vocational agricultural teacher.

Opportunities for placing the younger students.

Lack of available land as 75% of my kids are living in projects and mobile homes.

Lack of time to make visits and investigate projects. A broader scope of projects is needed particularly in Agribusiness.

With the decrease in farming activities, students are not as interested in production type projects.

None--except job market and economy.

Time

Time with students and parents.

Board decision to cancel summer program in salary cutback.

Students who live in apartments in town sometimes find it hard to get an SOE started. The school is located 5 miles from the nearest town.

It is essential to have a project supervision period of

summer program to make the SOEP work to maximum efficiency. The biggest problem I see is attaining funds to cover a supervision period of summer program.

Few students with opportunity in production ag. Those who do not must find some type of placement program. Jobs for students are very scarce in this area at this time.

Interest--Instructor

Finding adequate jobs for placement program.

The third open ended question was "What other comments do you have on the current trends relative to SOEP?" The following quotes are the teachers reactions:

SOEPs are needed in order to give a one to one relationship with each student and teach different skills that are needed with different SOE programs.

Our administration does not require large classes on the top end thus only real ag students enroll in 11th and 12th grades.

We need to increase public awareness and support for our SOE activities.

In order to make SOE work you must first identify where employment is in your state. Identify the competencies needed and determine which competencies will be addressed through the program and which will be addressed through the SOE. The students then develop his/her SOE around these competencies.

I think it's great that SOEP is being emphasized more.

I think students are enjoying their SOEPs more than before. I think it's because the type of student today is willing to work more than in the past.

SOEP is a must! It involves students, parents, and the teacher. The PR factor is tremendous.

There are more Math and Science requirements today than several years ago. Students only have one period left in their schedule to take an elective. This is not good, but it is the new trend--more academic classes and less vocational.

They are essential for maintaining departments (ag). Presently, we had to drop our 3rd Ag teacher and almost lost the 2nd Ag teacher. Through SOEPs we have experienced a 92%

increase in students the past 2 years. Does it work? You bet your leather boots it works!!!!

Too many departments are letting the program become too watered down. Due to more urban students. Town kids can still have SOEP.

Economic conditions make it difficult to convince parents of students that this type of investment, time, money will pay off.

Must participate!

We are in the first phases of a $500,000 animal science and hort. lab for our department very few students of today will enter into Prod. Agriculture about 40% of ours will be employed in related fields the older 60%.

I consider it the heart of my program.

We need to work harder to try to motivate students in SOEP. They are @M<very important>.

I believe teachers will have to find more stations in the private, non profit, volunteer type sector and funds diminish.

SOEP is the skill building to agriculture.

Every vo ag instructor has to keys putting more emphasis on SOE.

I believe SOEP is a very important part of the vo-ag department's total program. It makes vo-ag truly vocational in nature--you can relate student experiments in SOEP to the classroom.

An intensive SOE program in a department requires much time and effort. Compensation in time or pay should be included if a department is expected to have a good SOE program.

Dropping extended summer contracts.

Current trends in all vo-ed should be toward a generalized program away from specific job skills. Vo-ed needs to be unloaded from the placement business and put more in the education business.

Regardless of the problems, the benefits far outweigh them. The program should be stressed.

It is very important and should be the brunt of our education in ag.

Need to be more open minded in South Dakota of what qualifies as a suitable SOEP.

The Soep is the backbone of vo-ag whether it be in production or agribusiness, because that is where they get the best possible kind of vocational experience.

More emphasis needs to be placed on their farming program.

None

The trend is to be involved in farm or business placement. We need to survey the students hobbies and interests--compare these with opportunities in the community and develop SOEP which help meet those needs.

It is important and will be more so in the future.

School administrators are critical and do not want to fund time for supervision.

I predict the % of our students with production property will decrease in the future.

1. Must allow more diversified types and job site in placement. (The basic job skills and experience are just as important to employees as whether its a definite agribusiness or not.) We get too hung up as to what is agribusiness and what's not agribusiness! (Mainly due to FFA degree and prof. award rules and interpretations.

None

Emphasis needs to be continued. They are an important learning tool.

Every vocational agriculture program should or must have this type of program.

SOE is essential for a quality Vo. Ag. program.

My state has put a good amount of time in stressing the SOEP as we have attended several workshops. I believe @M<every> student should have a SOEP.

I think that current trends, i.e. improvement projects, gardening, flower beds, have to be emphasized to enhance student interest. Many students no longer have the facility to grow an acre of corn or raise a pig. Young teachers need to be made aware of the importance of SOEP, and of the new and current trends.

More ag teachers had better be getting in gear or they will be gone.

Need more money for school land lab based SOEP.

It's a great program.

Students not having need to work.

Many advantages to continuing developing them. Using school land labs is a new idea to us here at WMR High School and has many good possibilities for the future.

I am very pleased with the increased emphasis on SOEPs as I believe it is a key component in a successful vo-ag program allowing students to learn by doing.

I think it is very important to place increased emphasis on SOEP. Learner outcome and competencies fit right in.

CHAPTER 3

CONCLUSIONS

In the introductory chapter four research questions were identified. The four research questions included:

1. What is the percentage of students in secondary agricultural education who participate in the SOE program.
2. Which of the SOE options is most often used under different situations.
3. What are the opinions of secondary agriculture instructors about the importance of SOE in agricultural education.
4. What are the opinions of secondary agriculture instructors about the future of SOE in agricultural education.

The following conclusions to the research questions were formulated based on a sample of teachers identified by state supervisors and teacher educators from a cross section of randomly selected states in the U.S. The teachers were identified as the best directors of SOE in their state.

One of the research questions was "What is the percentage of students in wecondary agricultural education who participate in the SOE program?" The conclusions drawn from the data were that about 91% of students in secondary agricultural education were involved in the SOE program.

There were differences in the extent that students were involved in SOE. Only 84% of ninth graders had a SOE program. Ninty six

percent of eleventh graders had a SOE program and 92% of tenth and twelfth graders were involved with the experience program.

The second research question asked "Which of the SOE options is most often used under different situations?" The supervised farming is the SOE option most often selected by students. However, none of the SOE options has a majority of agricultural students.

Students in the ninth grade selected the supervised farming option 40% of the time while the percentage of students using the option increased as they moved through the grades. Twelfth graders selected it 47% of the time. Likewise, the placement option was used by 22% of the ninth graders and increased as students moved into the higher grades with 36% of twelfth graders using the option. Just the reverse was true for the land laboratory. The study showed that 16% of ninth graders used the land laboratory option and the percentage of use declined as students moved through the higher grades. Only 9% of twelfth graders used the land laboratory option.

A further analysis of the data revealed that the age of the teacher seemed to influence the types of SOE programs selected. Older teachers had more of their students in the supervised farming option than younger teachers. More of the younger teachers had their students in land laboratory than older teachers.

The years of teaching experience of the teacher also seemed to affect the type of SOE option selected. Teachers with less experience had more of their students in the land laboratory option.

The location of the school influenced the SOE option selected. Students from rural schools selected the supervised farming option more than urban and suburban schools. In addition, rural schools had

less students involved in the land laboratory option than did urban and suburban schools.

Students in the production agricultural option where more likely to select the supervised farming option than were the ornamental horticulture students. On the other hand, ornamental horticulture students were more likely to select the land laboratory option than were students in agricultural mechanics.

The size of school influenced the SOE option selected. Students from larger schools were more likely to select the land laboratory option than smaller schools.

Smaller secondary agricultural education programs had more students elect the supervised farming option than larger programs. Larger programs had students that selected the land laboratory option than smaller schools.

An analysis was made on the effect of the type of school on the SOE option selected. However, the data did not show that the type of school which offered agriculture had any effect over the type of SOE selected.

The third research question to be investigated was "What are the opinions of secondary agriculture instructors about the importance of SOE in agricultural education?" Most teachers in the study felt SOE was more important today in their program than it had been in the past. The also felt they had placed more emphasis on SOE in their program during the past few years. In addition most felt that other teachers in their state were putting more emphasis on SOE now than they had in the past.

A further investigation was made on the opinions of teachers about the importance of SOE revealed there was no differences among teachers based on (1) age, (2) teaching experience, (3) type of school, (4) type of program, (5) size of school or (6) size of agricultural education program. There were differences based on the school setting. More teachers from rural areas felt they placed more emphasis on their programs now than in the past than did suburban and urban teachers. In addition, more teachers from their state were emphasizing SOE less now than in the past than did rural teachers.

The final research question was "What are the opinions of secondary agriculture insturctors about the future of SOE in agricultural education?" Teachers in the study indicated they expected to place more emphasis on SOE in the future. They also felt that other programs in their states would place more emphasis on SOE in the future.

A further analysis of the opinions of teachers about the importance of SOE revealed some differences among the respondents. Younger teachers felt more strongly than older teachers that others in their state were emphasizing SOE more now than they had in the past.

Less experienced teachers expected to put more emphasis on SOE in the future than the more experienced teachers. Less experienced teachers expected other teachers in their state to put more emphasis on SOE in the future than did more experienced teachers.

School location had an effect on the opinions of teachers. Teachers from rural rural areas expected more emphasis by others on SOE than did teachers from urban and suburban areas.

The type of agricultural program had an effect on the opinions of teachers about the future of SOE. Ornamental horticulture instructors expect to put more emphasis on SOE in the future than production agriculture and agricultural mechanics instructiors.

As much as agriculture education touts the value of SOE, there were a number of students in the programs of some of the best directors of supervised occupational experience programs in America who did not have a SOE program. Even though a wider array of options were available to teachers at the time of the study than at other times in the past there was still a gap in the experience program that must be filled if every student is to take part in the important SOE phase of the program. Perhaps, either new options need to be developed or more work will need to be done to adapt the existing options to the circumstances of students and teachers.

One of the most obvious conclusions was that SOE in agriculture is multidimensional in the SOE options utilized by students. There was no dominant option. All three SOE options were widely used in agriculture programs. However, teachers in different types of agriculture programs tend to utilize one type of SOE option more than another type of agriculture. In addition, students from different localities, i.e. rural, suburban, urban, utilize different types of SOE. Teachers of different age groups and teaching experience seem to emphasize different types of SOE options for their students. Programs offered in different size schools and different size programs emphasized different SOE options.

All of this variation implies that teachers must be well grounded in appropriate SOE supervisory skills for all three options. In addition, students preparing to teach in different types of agriculture programs should have more emphasis placed on the option they will be most likely to use in their programs, i.e. supervised farming and placement for production agriculture and placement and land laboratory for ornamental horticulture.

There was a great deal of commonalty among teachers supervising occupational experience programs. However, there are a number of areas where they disagree significantly on SOE. Ornamental horticulture teachers and teachers from large schools expect other teachers to emphasize SOE less in the future while production and agricultural mechanics teachers expect more emphasis to be placed on this area. The implication was that special attention should be placed on SOE when working with ornamental horticulture and production teachers, particularly the less experienced group, expected to put more emphasis on SOE in their own program in the future.

There was the feeling among rural and urban teachers that SOE was being emphasized more in their state by other teachers. The implication is that there is a positive movement in some areas of states in expanding SOE. Suburban areas don't seem to share this enthusiasm.

RECOMMENDATIONS

Agriculture in the public school is a very diverse program. The results of this study reinforce this conclusion. The realization of the extent of the diversity is the key element one must consider when making recommendations based on the study.

1. More emphasis must be placed on preparing teachers who are capable of supervising competently the (1) supervised farming option, (2) the placement option and (3) the land laboratory option.
2. Most of the FFA programs focus on rewarding the accomplishments of the supervised farming program. The fact of the matter appears to be that less than 50% of even the students in the production agriculture program utilize the supervised farming option. Much more must be done to reward the results from both the placement and land laboratory SOE options.
3. Particular attention must be given to SOE in larger schools and in ornamental horticulture programs which seem to be the areas of greatest pessimism exists concerning the SOE program.
4. The SOE program has been studied much in the past, so much that some ask what could be left to look at. The results of this study appears to raise questions that are not easily answered from the research literature in agriculture. If anything, the results raises more questions than it answers. There is an

urgent need to conduct further research to find answers to some of the following questions raised by the study.

a. Why don't 9% of the students in some of the best SOE programs in America have an SOE program.

b. Why do different types of agricultural programs in different size schools have such differences in programs and opinions about different aspects of the SOE program.

c. What types of new FFA programs would be most appropriate for the SOE programs of the 80's.

d. What "approved practices" can be given to teachers supervising each SOE option. Particular attention must be given to placement and the land laboratory which seem to be expanding at the expense of the supervised farming option.

Appendix 1
Introductory Letter

<data ad.doc>
<set date=?>
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<name>
<title>
<school>
<IF address><address>
<ENDIF
<city>

Dear Mr. <personal>:

I am in the process of surveying some key vocational agricultural departments in the United States to examine some of the trends that are taking place in our profession. State leaders in your state have indicated that your program at <school> is one of the leaders in Supervised Occupational Education. Enclosed is a survey instrument that I would like for you to complete.

The information you provide will help us who are in teacher preparation to better understand events that are taking place in the profession and to prepare new teachers to cope in the modern vocational agriculture department.

After completing the questionaire place the form in the return envelope enclosed and return it to Michigan State University for processing. Feel free to make any comments you feel would be important to understand your program that were not adequately addressed in the questionaire.

Thank you in advance for your assistance.

Sincerely,

Frank Bobbitt
Professor
Agricultural and Extension Education

Appendix 2

SURVEY OF SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS IN AGRICULTURE

The modern vocational agriculture program is continuing to evolve. There are a number of changes that innovative teachers have incorporated into the supervised occupational experience program (SOEP). This study is an attempt to better understand how outstanding teachers are coping with the supervised agricultural experience program in 1985.

Please feel free to express yourself as you really see the situation. The returns will be kept strictly confidential and your individual responses will not be identified with you in any way in the report.

The instrument has been kept as short as possible, however, feel free to comment where you think it would improve our understanding of your program. If you have illustrative literature about your program that would help understand your program, I would appreciate you including that with the completed instrument when you return your form.

Questionaire

1. What is your age_____2. Sex_____3. Number of years teaching voag_____?
4. Is your school (1) rural (2) urban (3) suburban?
5. Is your school (1) an area vocational school or (2) a comprehensive high school?
6. Do you teach (1) production agriculture (2) ornamental horticulture (3) agricultural mechanics (4) or other_____?
7. What is the number of students in high school?_____
8. What is the number of students in voag?_____?
9. What is the number of voag students in 8th grade_____9th grade_____10th grade_____11th grade_____12th grade_____?
10. What is the number of students with supervised occupational experience programs in 8th grade_____in 9th_____in 10th_____in 11th____in 12th_____?
11. What is the percent of your voag students with supervised farming as the only or dominant SOEP in 8th grade_____9th_____10th_____11th_____12th_____?
12. What is the percent of your voag students with placement as their only or dominant SOEP in 8th grade_____in 9th grade_____ 10th grade_____ 11th grade_____ 12th grade____?
13. What is the percent of your voag students with the school land laboratory as their only or dominant SOEP in 8th grade_____9th_____10th_____11th_____12th_____.
14. What percent of the student's grade is based on their SOEP?____.
15. How often do you visit the average student to observe their SOEP?_____.

16. Under ideal conditions which of the 3 SOEP options facilitates student learning best? (circle one)
(1) Supervised Farming (2) Placement (3) School Land Laboratory
17. Under your working conditions which of the 3 SOEP options does the least effective job of training students? (circle one)
(1) supervised farming (2) placement (3) land laboratory
18. Is SOEP as important part of your program today as it was in the past? (Circle one) (1) Yes (2) no
19. Where do you think the most effective SOEP takes place? (circle one) (1) Supervised Farming (2) Placement (3) Land Laboratory.
20. How many hours did you spend on SOEP last week?_____
21. What percent of your students have you visited once this past year?_____
22. What percent of your students have you visited twice or more this year?_____
23. Over the past few years has SOEP been emphasized
(1) more (2) less (3) the same in your program?
24. During the next few years do you predict that SOEP will be
(1) more important (2) less important (3) about the same importance as it now is in your program today?
25. Over the past few years has SOEP been emphasized
(1) more (2) less (3) the same in other voag programs in your state?
26. During the next few years do you predict that SOEP will be
(1) more important (2) less important (3) about the importance as it now is in other voag programs in your state?
27. What percent of your students keep a record book of their SOEP activities?_____
28. To what factors do you attribute your success in making SOEP work in your school?_____
_____
_____
_____
_____
_____29. What is your biggest problem making SOEP work in your school?_____
_____
_____
_____
_____30. What other comments do you have on the current trends relative to SOEP?_____
_____
_____
_____
_____

Thank you

Appendix 3
Follow Up Letter

<data followup.bak>
<set date=?>
<date>

<name>
<title>
<school>
<IF address><address><ENDIF>
<city>

Dear Mr. <personal>:

In September I sent to you a copy of a survey I am conducting of some key vocational agriculture departments in the U.S. concerning the supervised occupational experience program. To date I have heard from 50 of the 75 instructors that were identified in 15 states where the survey is being taken. In order to get as complete a return as possible I am asking those who were not able to respond on the first form to complete a second form that I am enclosing. If you have already completed the form, please accept my thanks for your help and write "completed" on the form and send it back to me.

The information you provide on <school> will help us to better understand events that are taking place in the profession and to prepare new teachers to cope in the modern vocational agriculture department.

After completing the questionaire place the form in the return envelope enclosed and return it to Michigan State University for processing. Feel free to make any comments you feel would be important to understand your program that were not adequately addressed in the questionaire.

Thank you in advance for your assistance.

Sincerely,

Frank Bobbitt
Professor
Agricultural and Extension Education

REFERENCES

Powers, Larry. " A Study of Professional Role Perceptions Held By Two Selected Groups Of Vocational Agriculture Teachers In Michigan. (Ph.D. dissertation, Michaigan State University, 1985).

Shahrokh, Darysoush. "A Study Of The Agricultural Competencies Of Senior Vocational Agriculture Students In Michigan Based On Their Supervised Occupational Experience Program". (Ph.D. dissertation, Michigan State University, 1983).